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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,456	02/08/2002	David L. Dickerson	MI22-1943	9958
21567	7590	11/05/2003	EXAMINER	
WELLS ST. JOHN P.S. 601 W. FIRST AVENUE, SUITE 1300 SPOKANE, WA 99201			MAI, ANH D	
			ART UNIT	PAPER NUMBER
			2814	

DATE MAILED: 11/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

9/10

Office Action Summary	Applicati n No.	Applicant(s)	
	10/071,456	DICKERSON ET AL.	
	Examiner	Art Unit	
	Anh D. Mai	2814	

-- Th MAILING DATE of this communication appears on th cover sheet with the correspondence addr ss --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2003 .
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 55-74 is/are pending in the application.
- 4a) Of the above claim(s) 55-68 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 69-74 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 10 September 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>9/10/03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of the Claims

1. Amendment filed September 10, 2003 has been entered. Claims 69 and 72-74 have been amended. Claims 55-74 are pending. Claims 55-68 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 8, dated July 30, 2002.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 69-74 are rejected under 35 U.S.C. 102(b) as being anticipated by Applicant admitted prior art (hereafter APA).

APA teaches a semiconductor construction as claimed including:

a semiconductor substrate (12) having a trench (20) extending partially therein and upper surfaces adjacent the trench;

an oxide layer (36) formed over the upper surfaces of the semiconductor substrate (12) and having an uppermost surface;

and an insulative material (30) filling the trench and having a portion outward of the trench and semiconductor substrate (12), the portion comprising an outermost upper surface

elevationally above the uppermost surface of the oxide layer (36) and sidewalls connecting the outermost upper surface with the oxide layer (36), the sidewalls comprising first and second curved segments, the first curved segment extending from the outermost upper surface and comprising a first apex directed away from the substrate (12), and the second curved segment extending from the first curved segment to the oxide layer (36) and comprising a second apex directed toward the substrate (12). (See Fig. 12).

With respect to claim 70, the insulative material (30) of APA comprises oxide.

With respect to claim 71, the insulative material (30) of APA comprises a first insulative material (24) partially filling the trench (20) and a second insulative material (28) formed over the first insulative material (24).

With respect to claim 72, the semiconductor construction of APA further comprising a polysilicon layer (38) formed against the uppermost surface of the oxide layer (36) and the portion of the insulative material (30). (See Fig. 12).

With respect to claim 73, the trench (20) of APA comprises sidewalls connected by a bottom wall, and wherein the first curved segments of the portion are elevationally above and between the sidewalls of the trench.

With respect to claim 74, the trench (20) of APA comprises sidewalls connected by a bottom wall, and the first curved segments of the portion are directly over the bottom wall of the trench (20).

Response to Arguments

3. Applicant's arguments with respect to claims 69-74 have been considered but are moot in view of the new ground(s) of rejection.

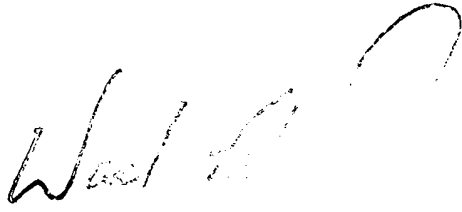
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh D. Mai whose telephone number is (703) 305-0575. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (703) 308-4918. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

A.M
October 30, 2003


SUPERVISOR
TECHNICAL STAFF